



$I(J^P) = ?(?)$ Status: *

OMITTED FROM SUMMARY TABLE

This would presumably be an isospin-1/2 particle, a $ccu \Xi_{cc}^{++}$ and a $cc\bar{d} \Xi_{cc}^+$. However, opposed to the evidence cited below, the BABAR experiment has found no evidence for a Ξ_{cc}^+ in a search in $\Lambda_c^+ K^- \pi^+$ and $\Xi_c^0 \pi^+$ modes, and no evidence of a Ξ_{cc}^{++} in $\Lambda_c^+ K^- \pi^+ \pi^+$ and $\Xi_c^0 \pi^+ \pi^+$ modes (AUBERT,B 06D). Nor has the BELLE experiment found any evidence for a Ξ_{cc}^+ in the $\Lambda_c^+ K^- \pi^+$ mode (CHISTOV 06).

NODE=S065

Ξ_{cc}^+ MASS

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
3518.9±0.9 OUR AVERAGE				
3518 ± 3	6	¹ OCHERASHVILI..05	SELX	Σ^- nucleus ≈ 600 GeV
3519 ± 1	16	² MATTSON 02	SELX	Σ^- nucleus ≈ 600 GeV
¹ OCHERASHVILI 05 claims "an excess of 5.62 events over ... 1.38 ± 0.13 events" for a significance of 4.8σ in $pD^+ K^-$ events. ² MATTSON 02 claims "an excess of 15.9 events over an expected background of 6.1 ± 0.5 events, a statistical significance of 6.3σ " in the $\Lambda_c^+ K^- \pi^+$ invariant-mass spectrum. The probability that the peak is a fluctuation increases from 1.0×10^{-6} to 1.1×10^{-4} when the number of bins searched is considered.				

NODE=S065M

NODE=S065M

NODE=S065M;LINKAGE=OC

NODE=S065M;LINKAGE=A

Ξ_{cc}^+ MEAN LIFE

VALUE (10^{-15} s)	CL%	DOCUMENT ID	TECN	COMMENT
<33	90	MATTSON 02	SELX	Σ^- nucleus, ≈ 600 GeV

NODE=S065T

NODE=S065T

NODE=S065215;NODE=S065

Ξ_{cc}^+ DECAY MODES

Mode
$\Gamma_1 \Lambda_c^+ K^- \pi^+$
$\Gamma_2 p D^+ K^-$

DESIG=1

DESIG=2

VALUE	EVTS	DOCUMENT ID	TECN	COMMENT	Γ_2/Γ_1
0.36±0.21	6	OCHERASHVILI..05	SELX	Σ^- ≈ 600 GeV	

NODE=S065R01

NODE=S065R01

NODE=S065

REFID=51290

REFID=51431

REFID=50832

REFID=48761

Ξ_{cc}^+ REFERENCES

AUBERT,B 06D	PR D74 011103	B. Aubert <i>et al.</i>	(BABAR Collab.)
CHISTOV 06	PRL 97 162001	R. Chistov <i>et al.</i>	(BELLE Collab.)
OCHERASHVILI..05	PL B628 18	A. Ocherashvili <i>et al.</i>	(FNAL SELEX Collab.)
MATTSON 02	PRL 89 112001	M. Mattson <i>et al.</i>	(FNAL SELEX Collab.)